



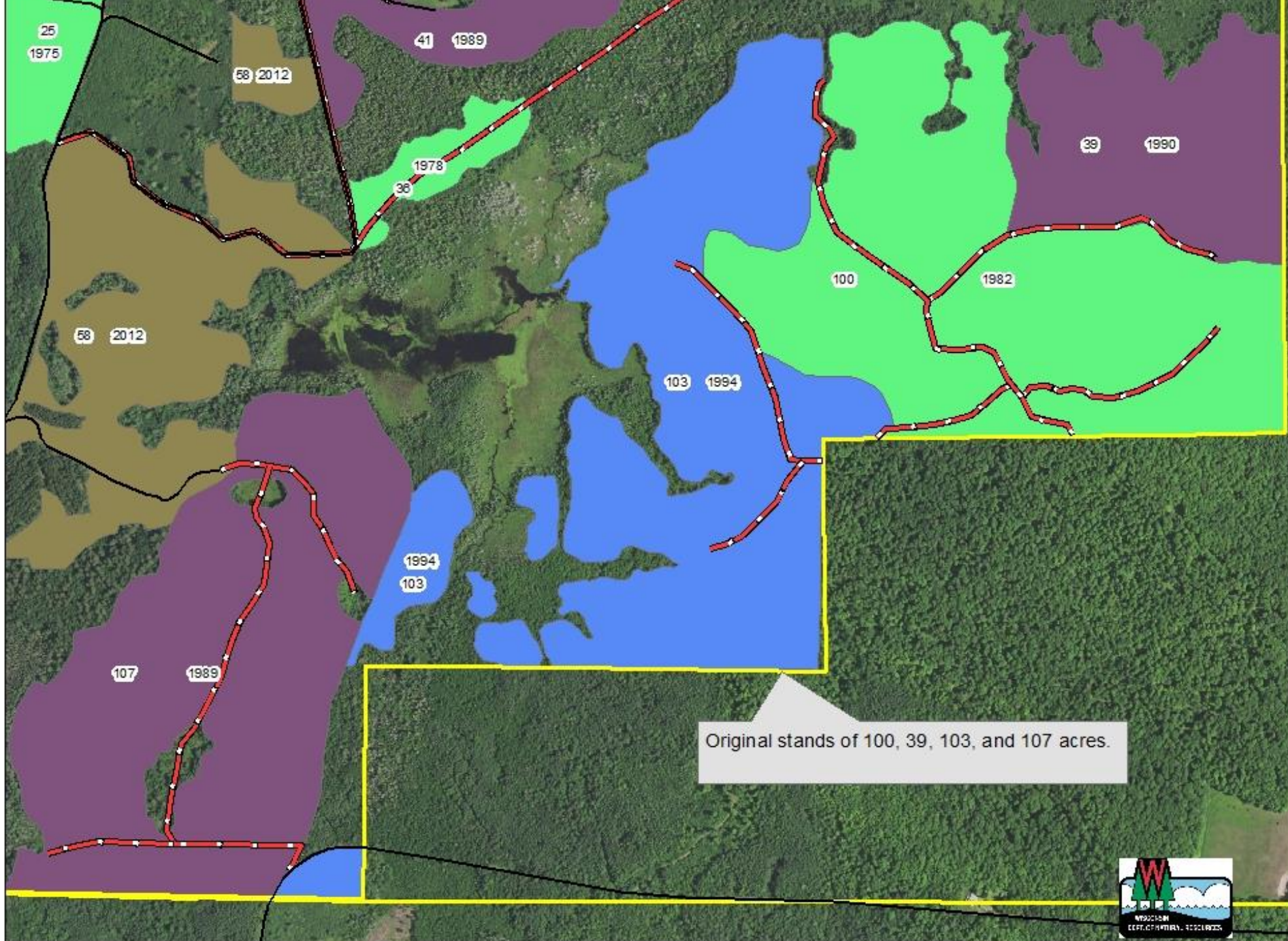
Young Forest Management Meeting Landowner Goals and Improving Wildlife Habitat



Tom Carlson

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Forest and Florence Counties



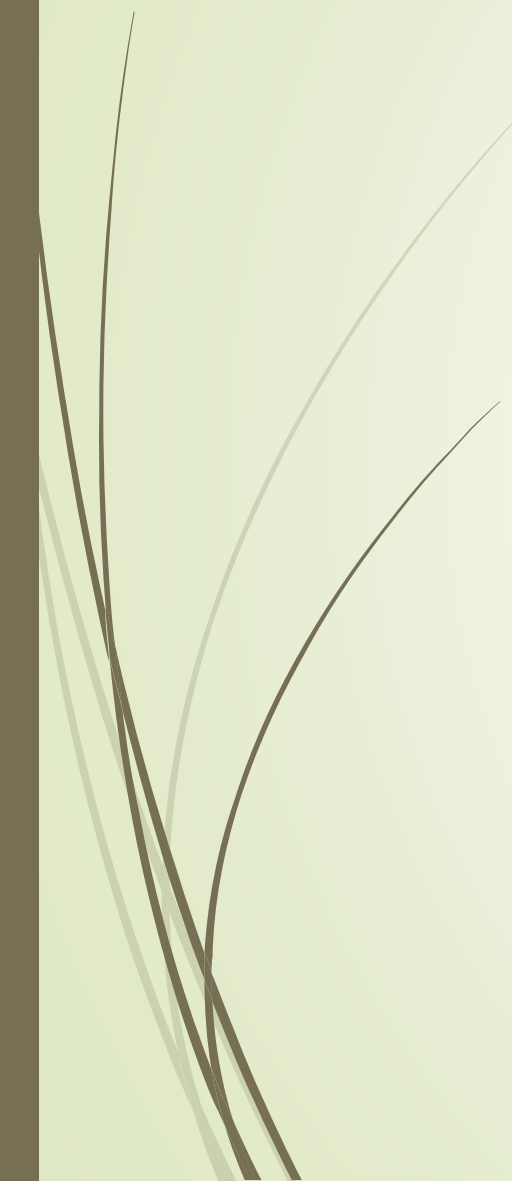
Original stands of 100, 39, 103, and 107 acres.







Forecast

- Who owns WI forests and reasons
 - What is young forest
 - Importance
 - Where to create/maintain
 - Habitat Management Guidelines
 - Real World Examples
 - Questions?
- 

WHO OWNS WISCONSIN'S FORESTS?

PRIVATE
67%

PUBLIC
30%

TRIBAL
2%



Top 5 Reasons for Owning

- Wildlife habitat
- Beauty and scenery
- Hunting
- Nature protection
- Privacy





What is Young Forest

- ▶ Dominated by young trees and shrubs mixed with grasses and forbs
 - ▶ 0-20 yrs (ephemeral)
- ▶ Require disturbance
 - ▶ Historically created by wind, tornados, wildfire, disease, and flooding
- ▶ Aspen/birch, oak, jack pine, spruce/fir, wildlife openings, shrub wetlands, old fields



Importance

- ▶ YF and associated species declines
- ▶ 48 species birds use pioneering forests
 - ▶ Used by many interior bird species post nesting/fledging
- ▶ 25 wildlife deemed SGCN in WI
- ▶ Game species
 - ▶ Sporting heritage
- ▶ Landscape diversity
- ▶ Natural disturbance suppressed
- ▶ Supports local economies



Young Forest Benefits

- Feeding and nesting cover ruffed grouse, woodcock, songbirds
- Protective cover for young and migrating songbirds
- Mimic natural disturbance to provide forest diversity
- Increased browse, bedding, and fawning cover for deer
- Improve access through land on roads and trails



Where to Create and Maintain?

- Aspen cover types
 - Not converting longer lived forest types
- Retain and enhance where it exists
- Improve habitat across landscape

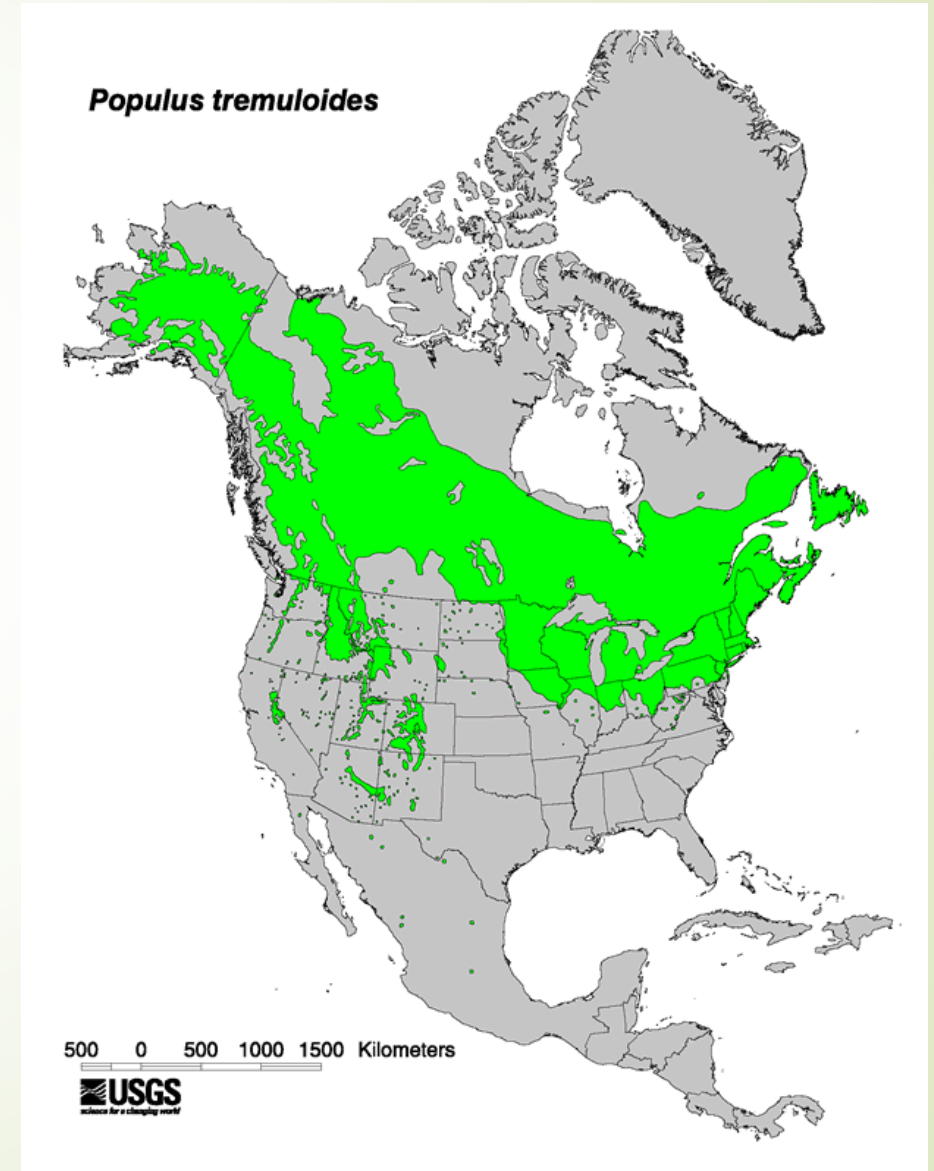




Figure 7. Timber management can diversify structure and bring back ESH, as shown just following management (left) and after 9 years post-harvest in aspen forest (right). Photos by Amber Roth.





Figure 4. Functional habitat regions of Wisconsin as delineated by the U.S. Forest Service's Forest Inventory and Analysis (FIA) program.

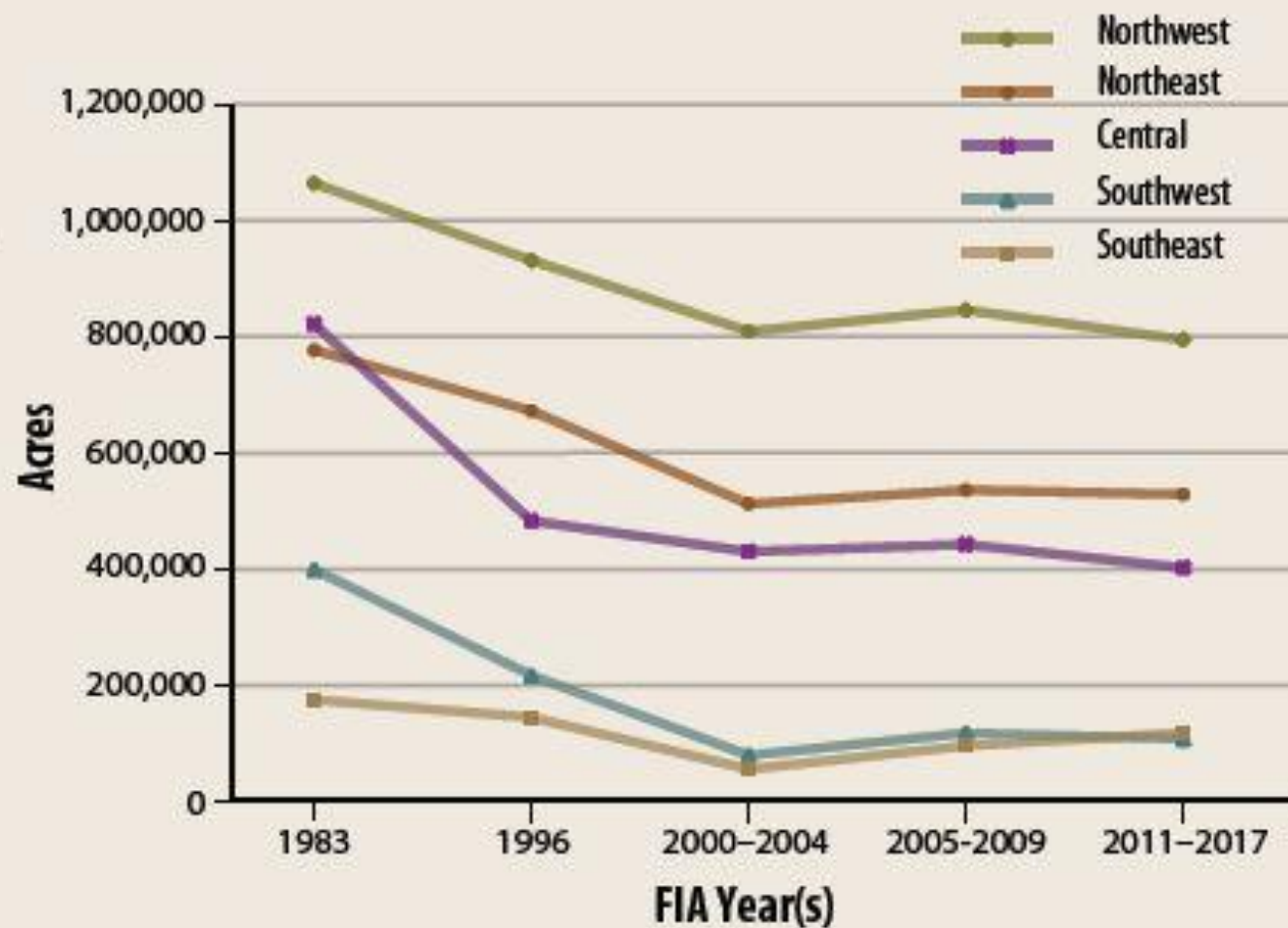


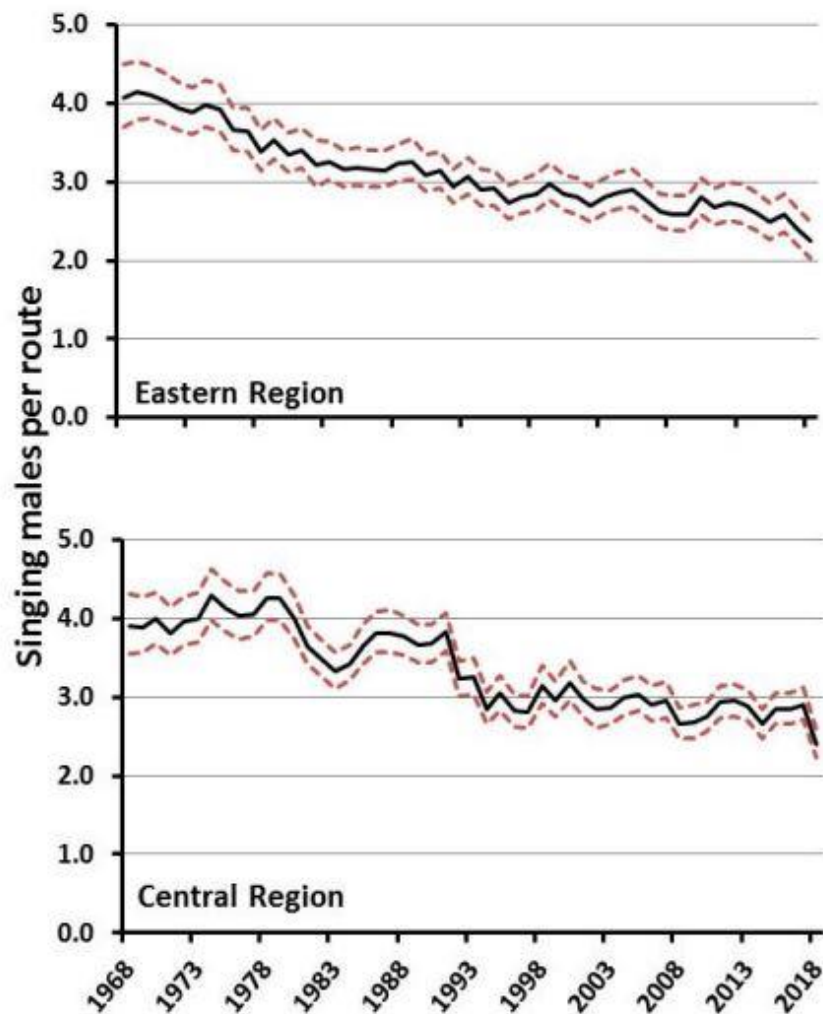
Figure 5. Young forest acres (0- to 20-year age class) in each functional habitat region of Wisconsin based on Forest Inventory and Analysis (FIA) data, 1983–2017.

A Changing Landscape

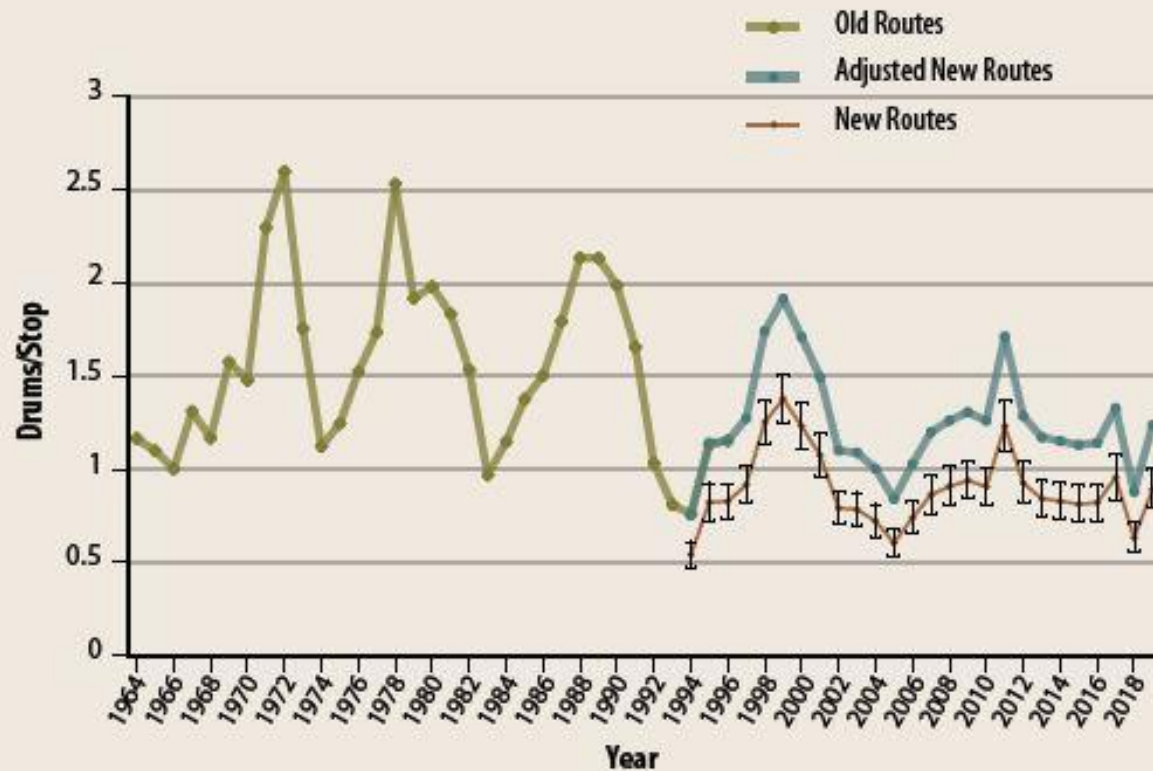
Table 1. Changes in acreage (%) and approximate annual rate of change (%) of aspen in Wisconsin between four major landowner groups based on Forest Inventory and Analysis data, 1983 and the period 2011–2017.

Ownership	1983 Acres	2011–2017 Acres	% Change, 1983-2017	% Change/Year
Private	2,481,849	1,751,922	-29.4%	-0.9%
County and Municipal	859,719	610,346	-29.0%	-0.9%
National Forest	355,880	326,205	-8.3%	-0.2%
State	160,269	209,645	+30.8%	+0.9%
All Ownerships	3,857,717	2,898,118	-24.9%	-0.7%

American Woodcock

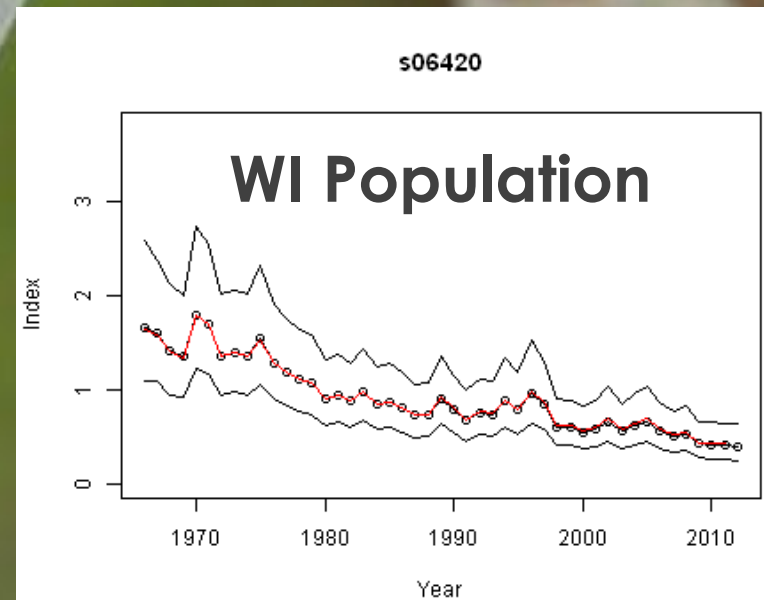
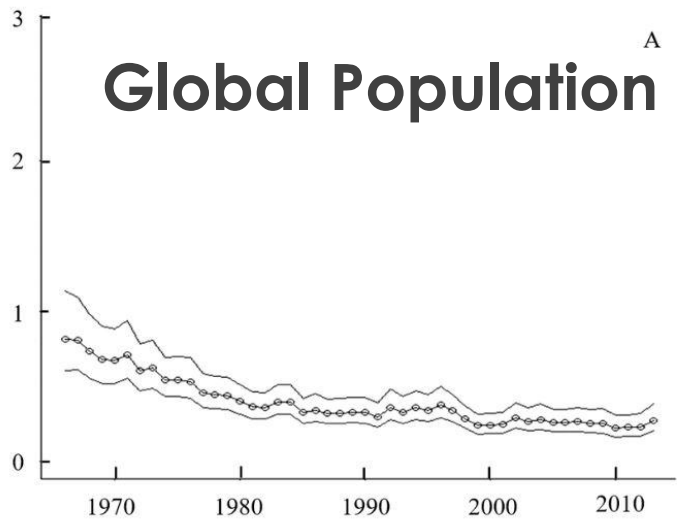
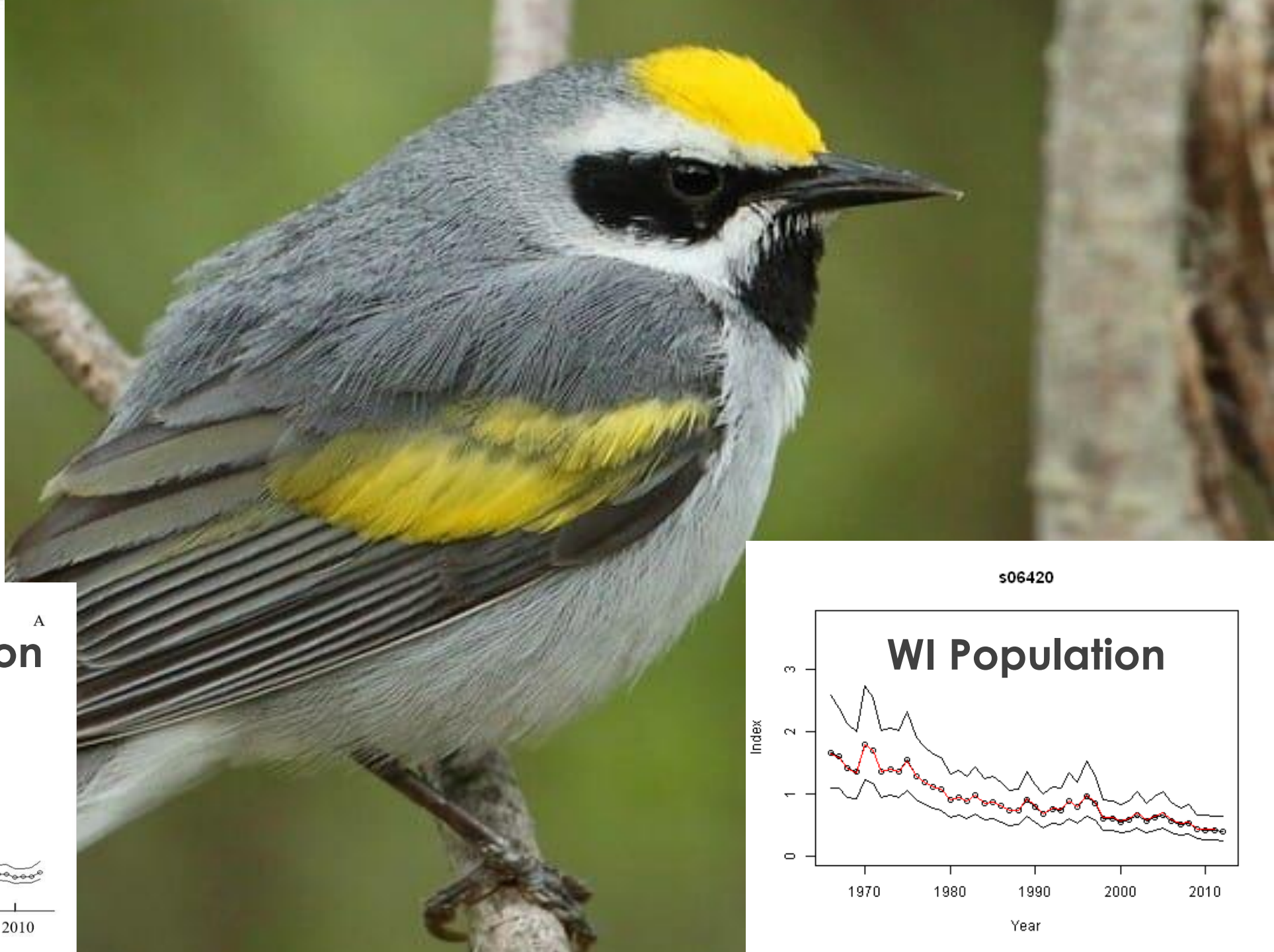


Ruffed Grouse





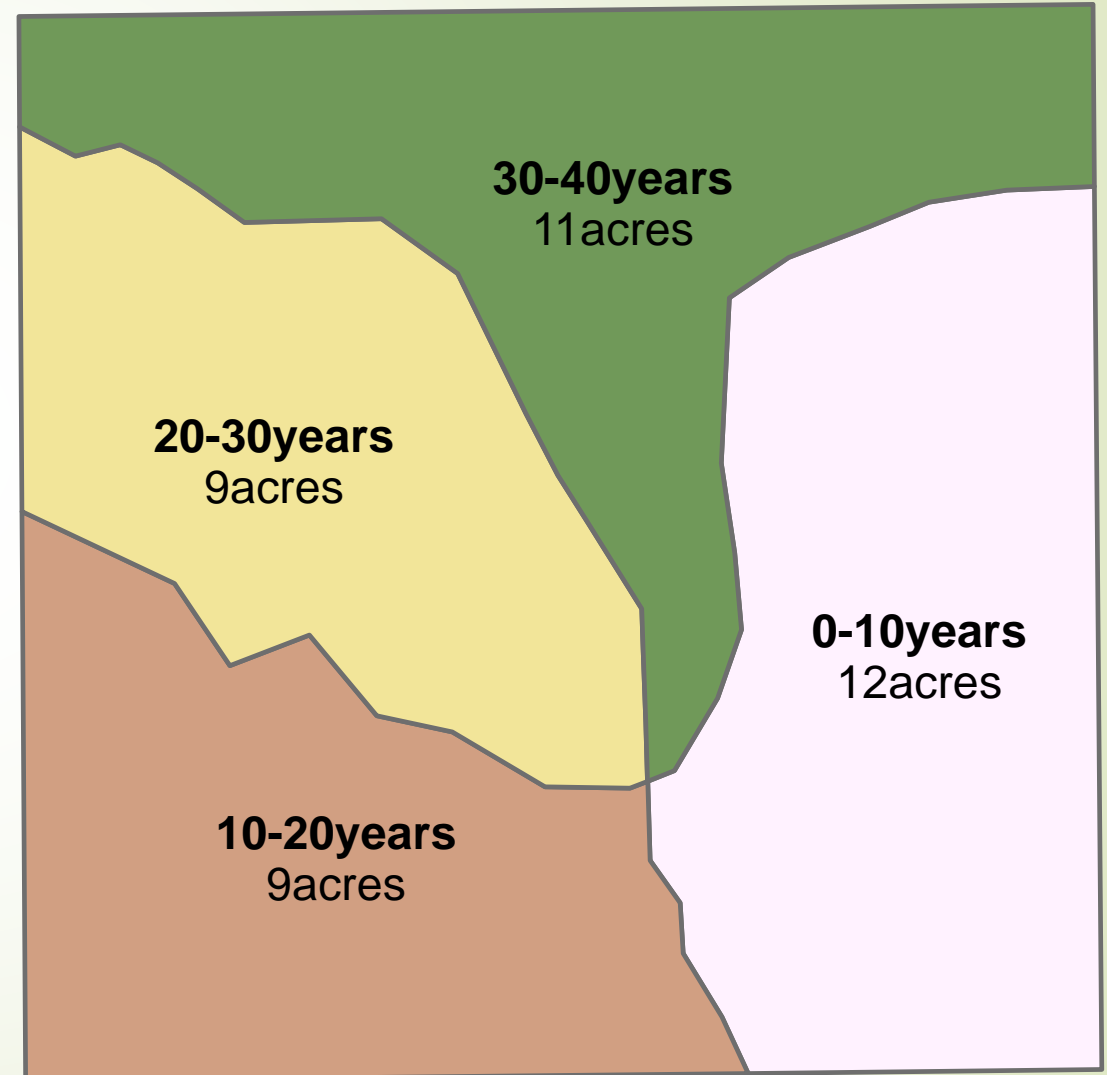
- All Seasons - Common
- All Seasons - Uncommon
- Breeding - Common
- Breeding - Uncommon





Goals of Aspen/YF Management

- Consistent/continuous presence
- Scaling down
 - Reduce patch size and improve distribution
 - Age class diversity
- Improve habitat and enjoyment of land
 - Deer, ruffed grouse, birds, reptiles, amphibian etc.



Habitat Management Guidelines

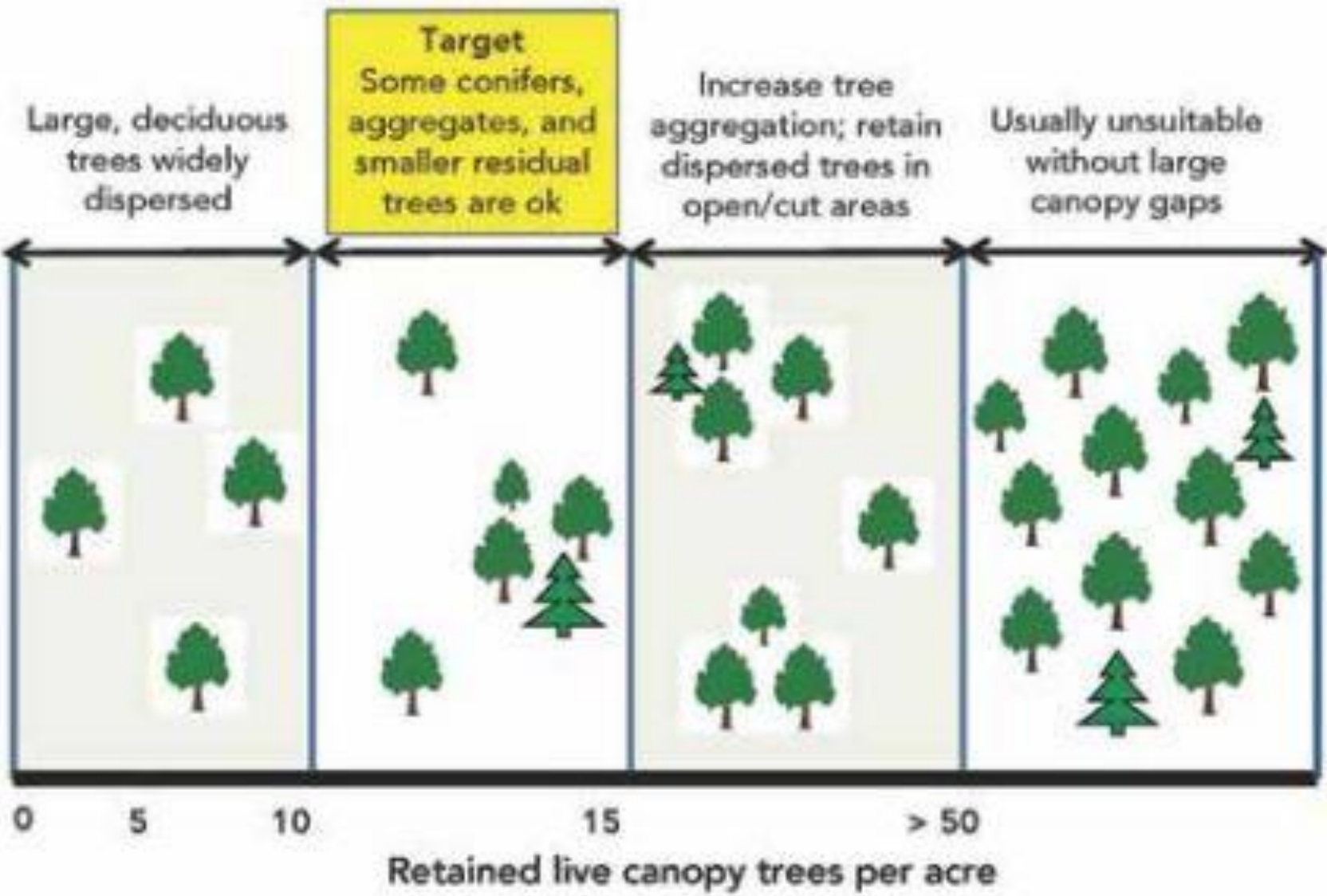
- 5-25 acre patch sizes with good distribution
 - Requires early and late entry
- 10-15 years between adjacent stands
 - 7 to 8 minimum
- 20-25% area in 10 years old or less
- 3-5 age classes in close proximity
- GTR: 5-15 trees/ac
 - 9"+ diameter preferred
- Up to 10% in wildlife openings

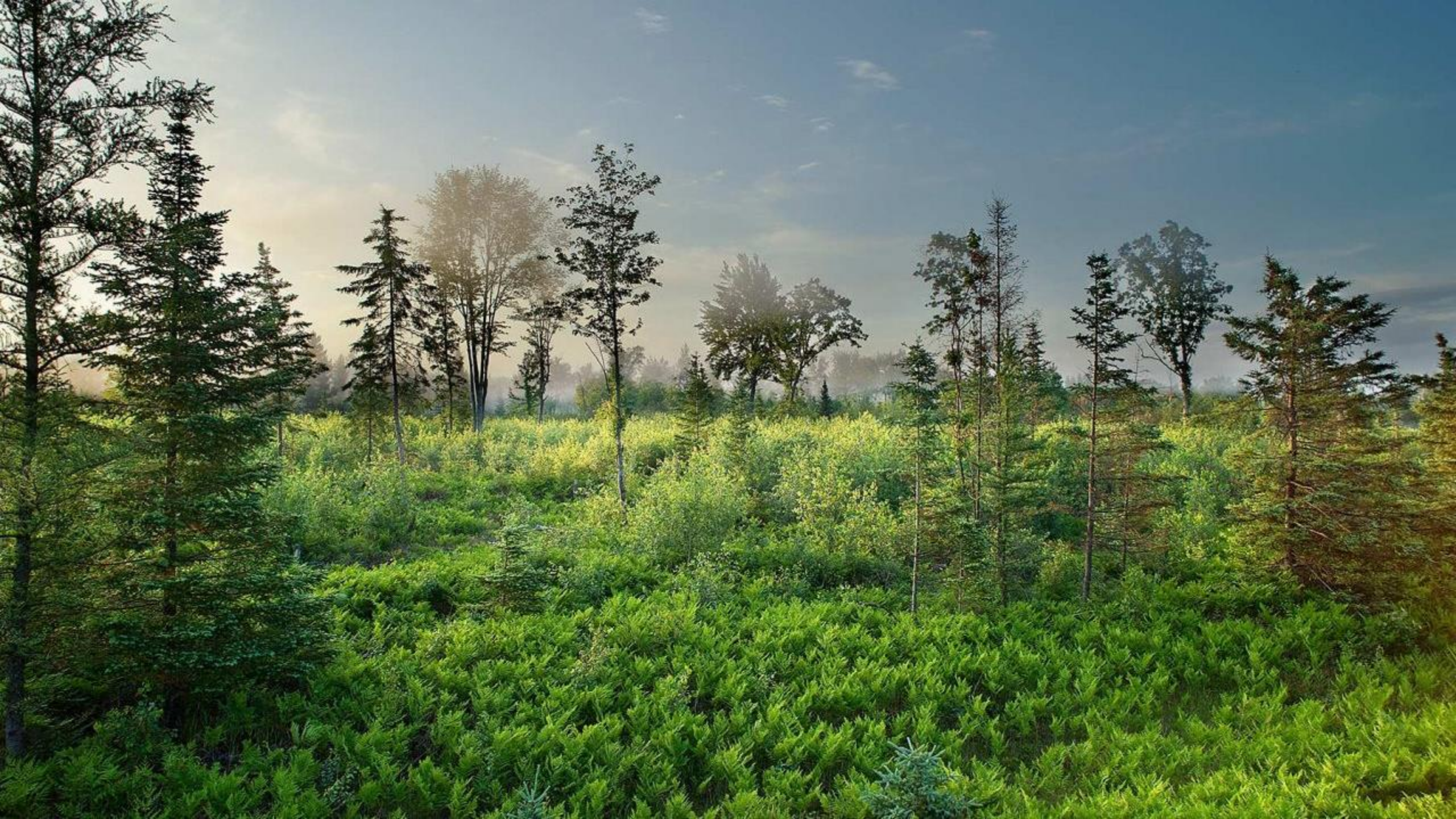




Green Tree Retention and Snags

- Biodiversity and wildlife
 - Cavities, perch sites, nesting, breeding, foraging
- Aesthetics
- Seed source
- Stand diversity
 - Legacy trees, under-represented

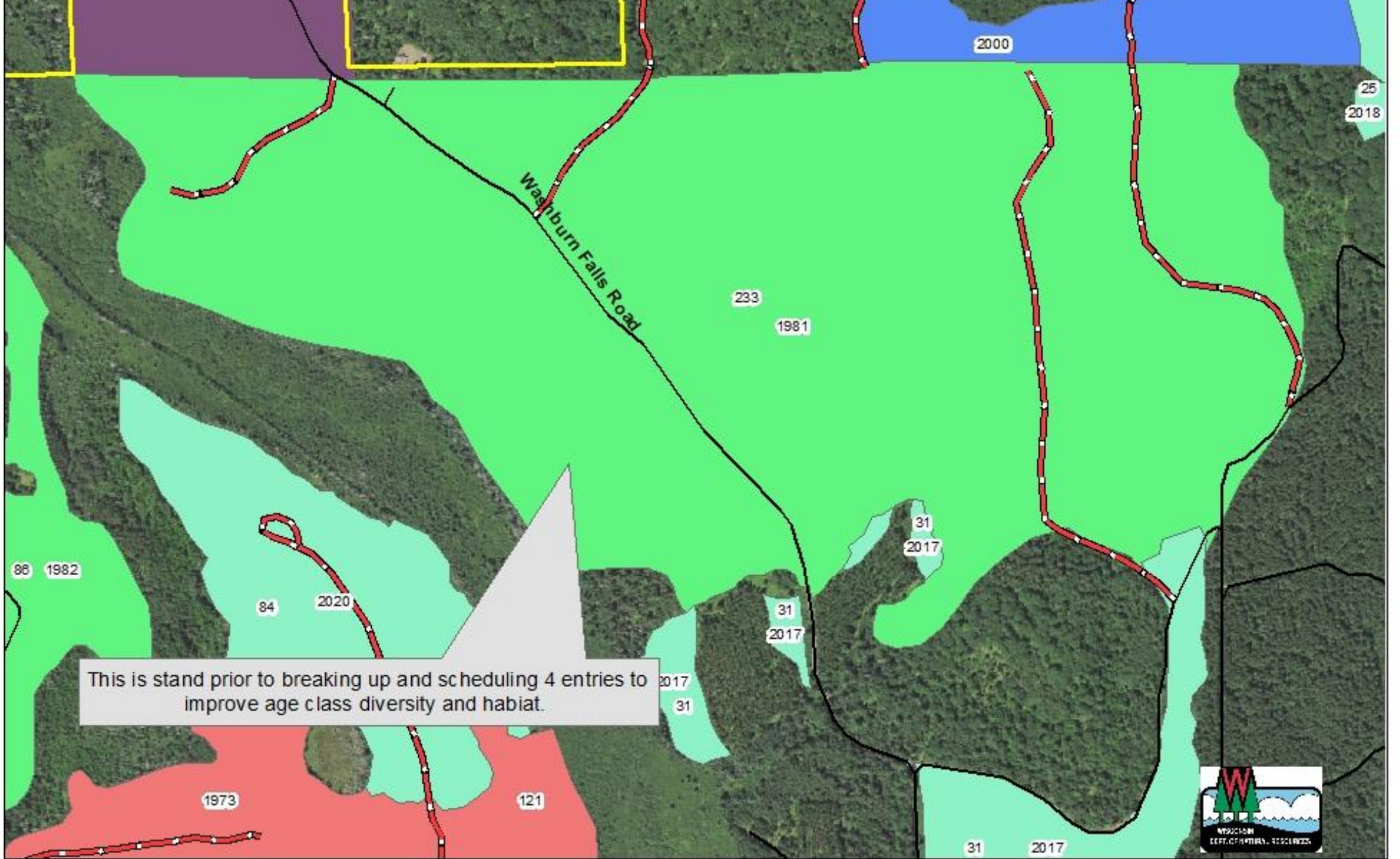




Operational Considerations

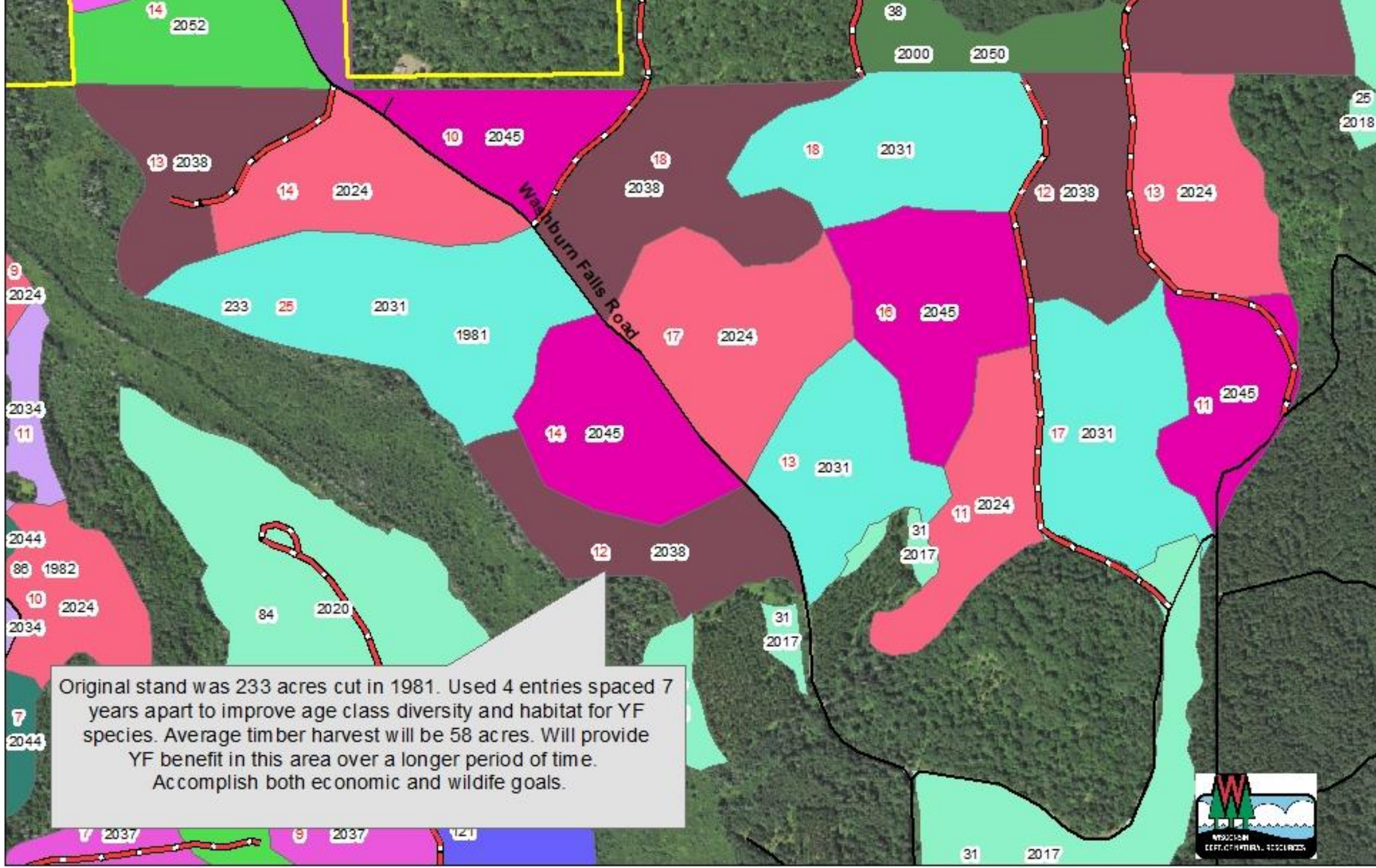
- ▶ Minimum acreage?
- ▶ Current age of stand
- ▶ How early can I enter?
- ▶ How late can I delay?
- ▶ Easy to administer
 - ▶ Use existing trails/roads
 - ▶ Landscape features
 - ▶ No landlocked patches
- ▶ Landing sites
 - ▶ Make great wildlife openings





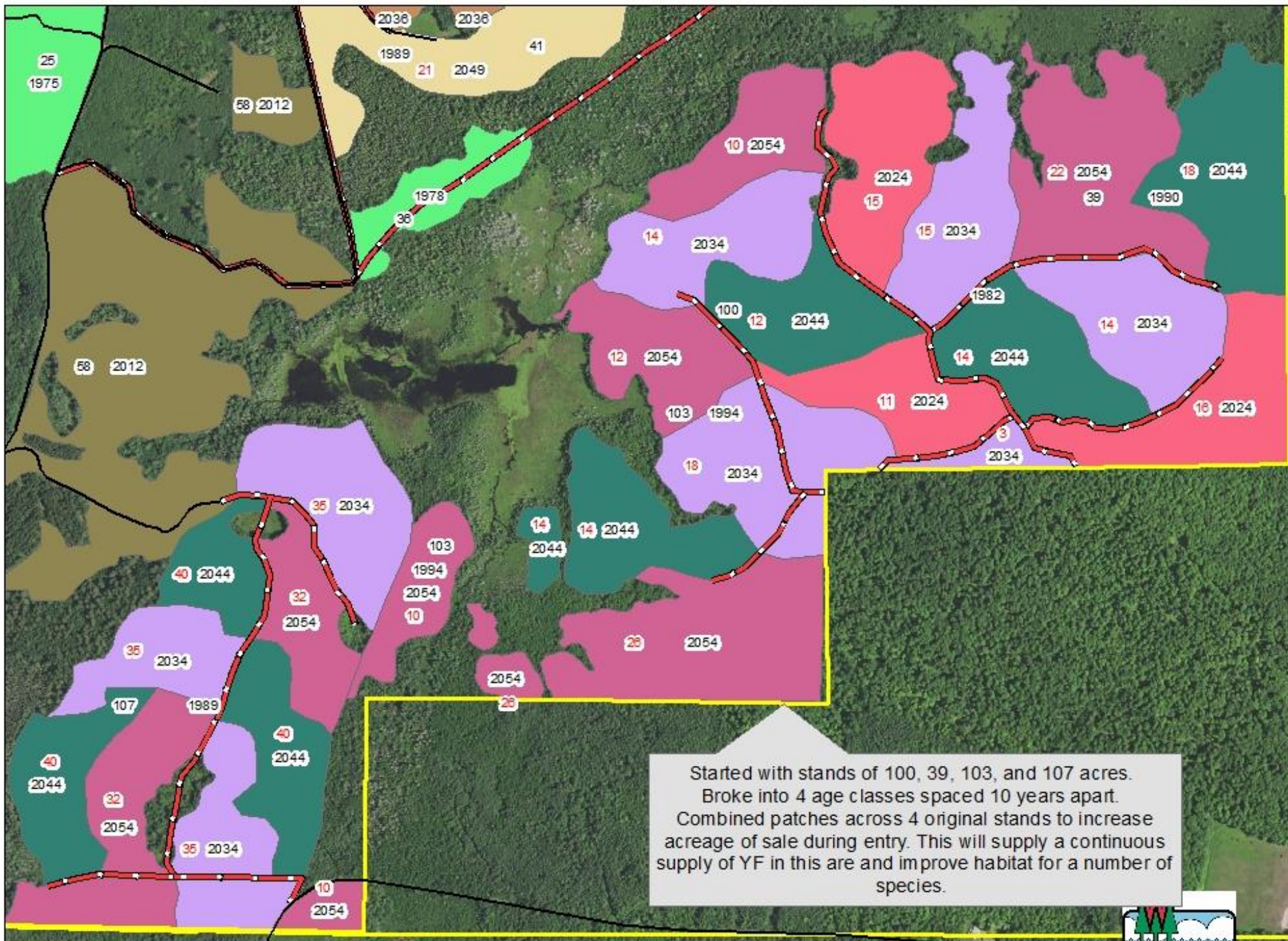
This is stand prior to breaking up and scheduling 4 entries to improve age class diversity and habitat.



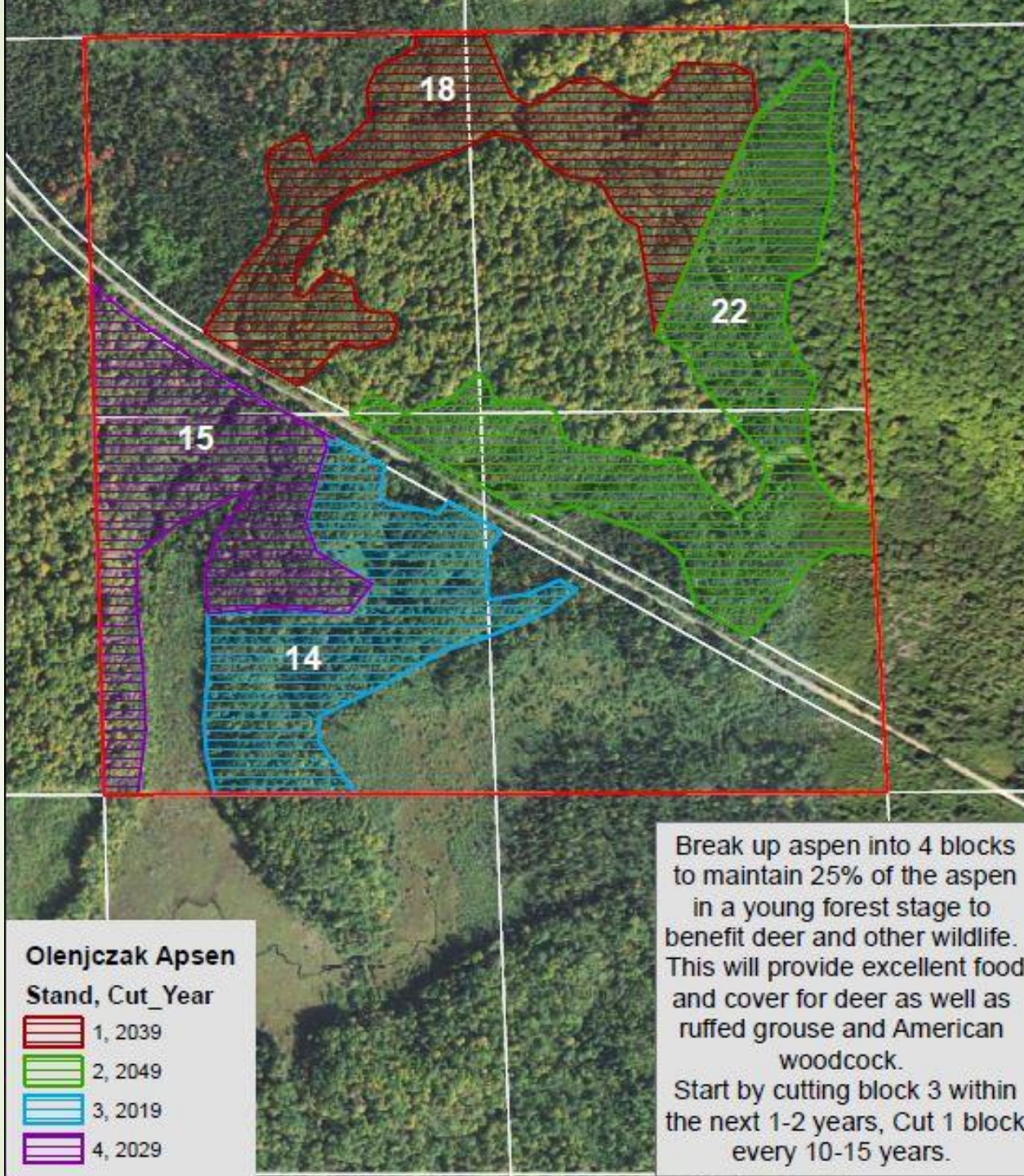


Original stand was 233 acres cut in 1981. Used 4 entries spaced 7 years apart to improve age class diversity and habitat for YF species. Average timber harvest will be 58 acres. Will provide YF benefit in this area over a longer period of time. Accomplish both economic and wildlife goals.





Started with stands of 100, 39, 103, and 107 acres.
Broke into 4 age classes spaced 10 years apart.
Combined patches across 4 original stands to increase acreage of sale during entry. This will supply a continuous supply of YF in this area and improve habitat for a number of species.



Break up aspen into 4 blocks to maintain 25% of the aspen in a young forest stage to benefit deer and other wildlife. This will provide excellent food and cover for deer as well as ruffed grouse and American woodcock.

Start by cutting block 3 within the next 1-2 years, Cut 1 block every 10-15 years.



Questions

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Additional Resources Available @

Youngforest.org

